THE REJECTION

Claims 1-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Soucy (6,476,510) and Lacy (6,510,369).

ARGUMENT

The applicant hereby presents the argument that the Examiner has inappropriately combined prior art references in an effort to render the claimed invention obvious. Therefore, the rejections should be withdrawn.

Criteria for Establishing a *Prima Facie* Case of Obviousness

A review of the grounds of rejections indicates that the basis of the Examiner's rejections relies on the appropriateness of combining the teachings from several pieces of prior art to render the present invention obvious under 35 U.S.C. 103(a). Therefore, it is advantageous to first review the criteria for establishing a *prima facie* case of obviousness before setting forth the applicant's argument.

Section 2143 of the Manual of Patent Examining Procedure states that three basic criteria must be met for establishing a *prima facie* case of obviousness:

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or reference when combined) must teach all of the claim limitations."

"If the examiner does not establish a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness." Section 2142 MPEP, ch. 2100, p. 110. "When the references cited by the examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned." *In re Ochial*, 71 F.3d 1565, 37 U.S.P.Q.2d 1127 (Fed. Cir. 1995).

The courts have clarified the guidelines through rulings including the following.

Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 1385 (Fed. Cir. 2001) ("In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention.")

In re Dance, 160 F. 3d 1339, 1343 (Fed. Cir. 1998) ("When the references are in the same field as that of the applicant's invention, knowledge thereof is presumed. However, the test of whether it would have been obvious to select specific teachings and combine them as did the applicant must still be met by identification of some suggestion, teaching, or motivation in the prior art, arising from what the prior art would have taught a person of ordinary skill in the field of the invention.")

In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (there must be "some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references")

Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143 (Fed. Cir. 1985) ("When prior art references require selective combination by the court to render obvious

a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself.")

Argument Presented Regarding the Rejection of Claims 1-20 (35 U.S.C. 103(a))

Re: motivation or suggestion to persons in the art to combine the references

It is the applicant's position that there is no motivation or suggestion to persons with ordinary skills in the art to combine the teachings by Soucy and Lacy to arrive at the teaching of the present invention.

Soucy teaches that "a further-driven system for electric power generation is controlled according to increased values a load power demand and a turbine output shaft speed" (the last sentence of the Abstract), which can be used in an aircraft.

Lacy teaches an entirely unanalogous art, which is residential load controlling (shedding and re-connecting). Its specification and independent claim 1 clearly limit the scope of the application to "a fuel cell system adapted to provide power capable of being consumed by residential loads..." (claim 1).

Neither Soucy nor Lacy contains the suggestions or motivation to combine the two references. A person skilled in aircraft electric load controlling should not be reasonably expected to be well versed in residential fuel cell powered systems.

In summary, there is no reasonable motivation or suggestion for a person skilled in the relevant art (aircraft electrical loads) to combine the two cited references.

Re: the requirement that the combined references teach all the limitations of the present invention.

The Examiner asserts that Soucy "teaches plurality of secondary loads (direct – generator, indirect – load, Fig. 1), at least one flight condition sensor (engine speed sensor), and a controller (fuel supply controller & governor) coupled to the plurality of loads and the sensor" and concedes that "Soucy doesn't explicitly teach how the controller will control the system to work efficiently."

While the applicant agrees on Soucy's lack of teaching the manner of controlling, it is the applicant's position that Soucy does not teach the loads or controller that are meaningful and functionally comparable to the present invention.

Claim 1 of the present invention reads as follows,

"A secondary electrical load power management system for an aircraft comprising:

a plurality of secondary electrical loads;

at least one aircraft flight condition sensor; and

a controller coupled to said plurality of secondary electrical loads and to said at least one aircraft flight condition sensor and determining engine secondary power extraction and current operating conditions of said aircraft, determining a engine secondary power extraction limit in response to said current operating conditions, and operating said plurality of secondary electrical loads in response to said engine secondary power extraction limit and said engine secondary power extraction."

The Examiner erred in reciting that Soucy "teaches plurality of secondary loads (direct – generator, indirect – load, Fig. 1)..." (line 3, section 4 of the office action) to allege the teaching of "secondary electrical loads" (claim 1) of the present invention. As claim 1 of the present application recites ("a secondary electrical load power management system for an aircraft comprising: a plurality of secondary electrical loads..."), the present application is solely concerned with electric loads. The generator in the Soucy reference is not an electrical load. Instead, the generator is a mechanical load powered by the engine and the generator's function is actually providing electricity to drive the electrical loads (Soucy, first full paragraph in the section titled Background of the Invention / 2. Description of Related Art).

The Examiner also erred in reciting that Soucy teaches "a controller (fuel supply controller and governor) coupled to the plurality of loads and the sensor" (lines 4-5, section 4 of the office action) to allege the teaching of "a controller coupled to said plurality of secondary electrical loads and to said at least one aircraft flight condition sensor...and operating said plurality of secondary electrical loads..." (claim 1) of the present invention. The fuel supply controller is coupled to the engine and the governor is coupled to the fuel supply controller. Fuel supply controller and governor in Soucy operate to control the supply of the fuel rather than any electrical load (Soucy, first full paragraph in section titled Background of the Invention / 2. Description of Related Art).

In summary, it is the applicant's position that the cited references, when combined, do not teach all the limitations of the present invention.

Therefore, the rejection of claims 1-20 under 35 U.S.C. 103(a) over the cited prior art should be withdrawn.

It is submitted that there is no *prima facie* evidence for obviousness and the allowance of the claims in the present invention is respectfully requested.

Respectfully submitted,

OSTRAGER CHONG FLAHERTY
& BROITMAN P.C.
Customer No. 44702

Joshua S. Broitman
Reg. No. 38,006

250 Park Avenue, Suite 825
New York, NY 10177-0899
T: 212-681-0600
F: 212-681-0300
Attorneys for Applicants

Date: April 14, 2006